TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.	JOB ORDER NUMBER	APPROP. FY
QSS Group, Inc.	NAS5- 99124 TASK NO. 152 AMENDMENT	566-288-11-03-89	FY00

TASK TITLE: (NTE 80 characters; include Project name)

Reconfigurable Computing Technology Development Services

APPROVALS: (Type or print name and sign)

	DATE	ORG CODE	MAIL CODE	PHONE
ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR): Tom Flatley	9-23-99	566	566	301-286-7029
BRANCH HEAD: Jim Stephens	9-23-99	566		301-286-8380
CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR): for Robert S. Lebair, Jr. Deborah A. Clark	9/23/99	560		301-286-6588

FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? (IF YES, NEED CODE 303 CONCURRENCE NEXT BLOCK)	CONTRACTING OFFICER'S QUALITY REP.	DESIGNATED FAM:
[X] NO [ ] YES	Larry Moore	

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)
C.O. Requested Quote on:
Date: SEP 24 1999

Contractor will develop specification or statement of work under this task for a future procurement. [X] NO [ ] YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. [ ] NO [ ] YES [X] N/A

Government Furnished Property/Facilities: [X] NO [ ] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: [ ] NO [X] YES If yes: [X] TOTAL [ ] PARTIAL
If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: [X] NO [ ] YES

Highlighted Contract Clauses: *(to be completed by Contracting Officer)*

The effective date for this task is October 8, 1999.

INCENTIVE FEE STRUCTURE (check one)
(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

	_X_ No. 1	___ No. 2	___ No. 3	___ No. 4	___ No. 5
Cost	10%	50%	25%	25%	%
Schedule	15%	25%	25%	50%	%
Technical	75%	25%	50%	25%	%

(To be completed by Contracting Officer)

The target cost of this task order is $127,199 .
The target fee of this task order is $ 8,149 .
The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is $ 135,348 .

The maximum fee is $ 11,910 .
The minimum fee is $0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

Lorrie L. Eakin
Contracting Officer

Lorrie L. Eakin — SIGNATURE OF CONTRACTING OFFICER
10/3/99 — DATE
TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE — DATE

GSFC FORM 703-1845 12/98 (OLDER VERSIONS ARE OBSOLETE)

DISTRIBUTION: CONTRACTOR, CONTRACTING OFFICER, COTR, CODE 303, RESOURCES ANALYST, ASSISTANT TECHNICAL REPRESENTATIVE

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REQUEST FOR TASK PLAN / TASK ORDER

CONTRACTOR	CONTRACT NO./TASK NO.		
	NAS5-	TASK NO.	AMENDMENT
QSS Group, Inc.	99124	152	

Applicable paragraphs from contract Statement of Work:

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

The contractor shall provide engineering services to the Ground Systems Hardware Branch for the development of Reconfigurable Computing (RC) technology and systems, including:

- o Provide RC development expertise and design services for algorithm translation, coding and FPGA implementation of the MODIS Adaptive Level One Accelerator (ALOA) 5-Band demonstration system.
- o Develop and deliver ALOA 5-Band demo system documentation containing sufficient detail to allow ALOA maintenance to be performed by another organization.
- o Deliver a report documenting the recommended RC design process based upon lessons learned during the ALOA 5-Band demo system development.
- o Provide RC development expertise and design services for algorithm translation, coding and FPGA implementation of the MODIS Adaptive Level One Accelerator (ALOA) Full-Band demonstration system.
- o Provide RC development expertise and design services for algorithm translation, coding and FPGA implementation in support of NPP instrument data processor prototyping/study efforts.

PERFORMANCE SPECIFICATIONS:

- o ALOA 5-Band demonstration system shall perform real-time processing and display of MODIS visible and fire detection band images.
- o ALOA 5-Band demonstration system documentation shall include software block diagrams, functional descriptions, source code and all development tool (hardware and software) and version information.
- o The RC Design Process Report shall contain detailed information outlining the design flow from receiving an algorithm from the science team through final FPGA implementation. Recommendations on improving and automating the process shall be included. Recommendations on algorithm input format, algorithm functional breakdown, hardware vs software process allocation, code translations, etc. shall be included.

APPLICABLE DOCUMENTS:

TASK END DATE: 9/30/00

MILESTONES/DELIVERABLES AND DATES:

ALOA 5-Band demonstration system complete: 11/30/99
ALOA 5-Band demonstration system documentation complete: 01/31/00
Initial RC Design Process Report complete: 02/29/00
Updated RC Design Process Report complete: 09/30/00

PERFORMANCE STANDARDS:

Schedule: On time delivery of the above
Technical: ATR's acceptance of the above

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

Tom Flatley, Building 23, Room E437